DOCUMENT RESUME

ED 316 818 CG 022 369

AUTHOR Kligman, Evan W.
TITLE Multiple Risk Factor Intervention in the Delivery of Primary Health Care to the Elderly: Lessons from Community-Based Programs.
PUB DATE Nov 89
NOTE 12p.; Paper presented at the Annual Meeting of the Gerontological Society of America (42nd, Minneapolis, MN, November 17-21, 1989).
PUB TYPE Reports - Descriptive (141) -- Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Behavior Change; *Delivery Systems; Health Programs; *Health Promotion; Intervention; *Older Adults; *Peer Counseling; *Volunteer Training

ABSTRACT

Within the past decade the role of the primary care physician caring for older patients has expanded to include counseling and "healthy aging" education to reduce multiple behavior risk factors. Project AGE WELL was a longitudinal study of the impact of a comprehensive and team delivered health promotion program on the health status of the elderly. Four hundred elderly adults have participated in this program through primary health care or wellness clinics. The AGE WELL staff implemented "Health Peers" in 1988. Through this program a group of Health Peers counselors (elderly volunteers) were trained through initial 2-day workshops with monthly update sessions. Preliminary results indicated that Health Peer counselors improved self-esteem and self-efficiency and were successful in content acquisition. The counselors reached a significant number of elderly peers individually and in groups to distribute important health information to change behavioral lifestyles to reduce risks. Through the Health Watch Of Arizona study in the Sun Cities, AGE WELL staff will train Health Peer counselors to serve as elderly educators within participating primary care physician offices. Health Peers will extend the role of primary care physicians in health promotion and may potentially have impact on "reaching the unreachable" for those persons who do not seek regular care. (ABL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED316818

MULTIPLE RISK FACTOR INTERVENTION IN THE DELIVERY OF PRIMARY HEALTH CARE TO THE ELDERLY: LESSONS FROM COMMUNITY-BASED PROGRAMS

Evan W. Kligman, M.D.

C6022369

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☑ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Evan W. Kligman

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Paper presented at the Annual Meeting of the Gerontological Society of American, 42nd, Minneapolis, MN, November 17-21, 1989.

BEST COPY AVAILABLE

MULTI-RISK FACTOR INTERVENTION IN THE DELIVERY OF PRIMARY HEALTH CARE: LESSONS FROM COMMUNITY-BASED PROGRAMS. E.W.Kligman. Project AGE WELL and Department of Family and Community Medicine, The University of Arizona, Tucson, AZ 85351.

Initiated in 1985 with support from the Brookdale Foundation, Project AGE WELL is a longitudinal study of the impact of a comprehensive and team delivered health promotion program on the health status of seniors. Four hundred seniors have participated in this program through primary health care or wellness clinics established at housing projects, senior centers and retirement communities. Data show that health promotion activities can be successfully delivered for seniors through primary care settings. Participation rates for on-going health education classes, exercise programs, support groups and individual counseling for nutrition and pharmacy can be sustained over several years.

The AGE WELL staff implemented "Health Peers" in 1988 with a grant from the U.S. Administration on Aging. Through this program a group of Health Peers counselors (senior volunteers) were trained through initial two-day workshops with monthly update sessions; it is presently established in five rural and urban areas in Arizona. Preliminary results show that Health Peer counselors improve self-esteem, self-efficiency and are successful in content acquisition. The counselors reach a significant number of senior peers individually and in groups to distribute important health information to change behavioral lifestyles to reduce risks.

Through the HEALTH WATCH OF ARIZONA study in the Sun Cities, AGE WELL staff will train Health Peer counselors to serve as senior educators within participating primary care physician offices. Health Peers will extend the role of primary care physicians in health promotion and may potentially have impact on "reaching the unreachable" for those persons who do not seek regular care.

MULTIPLE RISK FACTOR INTERVENTION IN THE DELIVERY OF PRIMARY HEALTH CARE TO THE ELDERLY: LESSONS FROM COMMUNITY-BASED PROGRAMS

Evan W. Kligman, M.D.
Department of Family and Community Medicine
The University of Arizona College of Medicine
Division of Restorative Medicine

Presented to:

Gerontological Society of America
42nd Annual Scientific Meeting
Minneapolis, Minnesota

November 18, 1989

INTRODUCTION

Within the past decade the role of the primary care physician caring for older patients has expanded to deliver counseling and "healthy aging" education to reduce multiple behavior risk factors. In addition to traditional assessment and treatment of acute and chronic conditions, physicians have become aware of recent epidemiological studies on the impact behavior risk factor reduction has on the prevention of chronic conditions and/or their regression. However, a major challenge remains to adequately prepare and motivate physicians to practice "preventive geriatrics." Skeptics within the medical community may question the physician's role in prevention as not being cost effective in the increasingly "high technology" practice of medical care. Though valuable physician time might not be necessary if patients followed optimal healthy lifestyles, the prevalence of unhealthy behaviors remains significant among the elderly.[1] Physicians need additional training to deliver preventive interventions to patients in practicing "prospective medicine" follows ancient traditions. Over four millenia old, Chinese proverbs remind us that ". . . the sages did not treat those who were already ill; they instructed those who were not yet ill. . . the able doctor acts before sickness comes and is paid only if he keeps his patients well."[2]

Preventive-oriented physicians of older adults have a formidable task of providing education to reduce traditional risk factors such as smoking, physical inactivity, ethanol use, stressful lifestyles, unsafe medication use, obesity, inadequate nutrition, and lack of seat belt use. Additionally, they need to incorporate into practice counseling on "protective factors" with knowledge gained in recent years on "predictors of healthy aging."[3-6] For instance, the protective effects of moderate physical activity appear to extend into the tenth decade of life to decrease measurable mortality and morbidity. The longevity traits of healthy, successful centenarians (of which there are now 25,000 in the United States, with this number doubling each decade)--love of life, spiritual faith, activity, discipline, altruism,

optimism--could be communicated to patients. The concept of healthy aging is evolving as a synergy or gestalt, as more than just the absence of disease and/or risk factors. Thus, a definition of geriatric health has emerged which encompasses social, emotional, intellectual, spiritual, as well as physical well-being.

Primary health care providers further need to reconsider the "time span" during which the majority of older patients will survive into. At age 65, the average male will live an additional 14.5 years and the average female an additional 18.6 years. Interventions to reduce risks for asymptomatic persons in their 70s may extend the health span by preventing or postponing the onset of certain diseases until their 80s or 90s, such as arteriosclerosis, diabetes, osteoporosis, and cancer.

Nevertheless, the reality is that primary care providers tend not to practice preventive geriatrics and continue to focus on disease treatment rather than its primary prevention or early detection. Immunization rates are low: only 20% of older adults receive an annual flu vaccination, and 45% have received a pneumonia vaccine despite up to an 80% efficacy rate.[7] Cancer screening rates are low: only 6% of minority women over age 50 have previously had a mammogram, and 25% of women over age 65 have never had a Pap smear despite the fact that over 50% of all new cases of cancer occur after the age of 65.[8,9] Counseling activities regarding behavioral risks are infrequent despite recent findings of the National Center for Health Statistics that among adults over 65: 16% smoke, 12% drink too much, 71% are sedentary, 20% are overweight, 41% have inadequate sleep, 50% don't use seat belts, and 11% complain of stress affecting their health.[10]

Poor physician performance is not due to lack of physician knowledge or negative beliefs about the importance of reducing risk and promoting healthy aging.[11] Most physicians do agree that patients should be advised to get adequate rest, good nutrition, increase activity, and take medications safely. The problem is that significant barriers exist that block primary care providers from engaging in multiple risk factor intervention and healthy aging counseling in the delivery of primary health care. These barriers include: <u>insufficient research</u> (older subjects are often excluded from research protocols; we lack sufficient research about the appropriateness of age based cut-offs for preventive interventions; data is not sufficient with respect to identifying cost-effectiveness of specific interventions, and findings are often conflicting); <u>inadequate training</u> (a recent study revealed that two-thirds of physicians surveyed feel that medical education was inadequate in the area of clinical prevention and aging);[12] <u>poor quality of some interventions</u> (especially those for the early detection of colorectal cancer);[13] <u>perceived lack of confidence</u>; <u>insufficient third-party reimbursement mechanisms</u>; <u>insufficient time and/or staff resources</u>; <u>lack of professional gratification</u>; and, perception among physicians that <u>older patients are uninterested</u> (only 10% of older persons have a regular primary care physician). Prevention is anonymous in many ways. Physicians cannot point to a specific person whose life was saved, for instance, by their smoking cessation counseling efforts.

Efforts are underway to break down many of these barriers: the Guide to Clinical Preventive Services[13] by the U.S. Preventive Services Task Force (1989), the Year 2000 National Health Objectives (1990),[14] and the Surgeon General's Workshop on Heath Promotion and Aging (1988).[15] Training is increasing in this area through medical school curriculum, residency activities in both primary care and clinical preventive medicine, and the proliferation of geriatric review courses and continuing medical education activities including geriatric prevention and healthy aging presentations. Physician training effectiveness has been evaluated by Project INSURE which found that physician risk factor education and counseling yielded short-term behavior changes in the areas of exercise, seat belt use, weight loss, reduction of alcohol use, and increase of breast self-examination among older women.[16] Nevertheless, improving the quality of interventions remains a goal for the next decade in identifying better biological markers to detect risk and/or disease early.

Breaking down the other barriers will require changes in physician and patient attitudes and health policy. Medicare and insurance coverage for periodic preventive health visits and risk rated health insurance premiums to motivate patients to reduce risks are a few recommendations that have been mentioned in recent years to accomplish these changes.[17] As important, however, may be a new "vision" for delivering state-of-the-art preventive geriatric care. This new vision encompasses two components: 1) a link-up of primary care providers with community coalitions and teams that offer health promotion programs and resources; and 2) personal health status monitoring technology.

Physician practices routinely linking up with community resources will serve to motivate older patients toward greater personal self-responsibility for health. Third generation health risk assessment technology available by the end of the 1990s will combine genetic risk assessment (to identify longevity and senescent genes mapped on the human genome) with traditional risk factor profiles, sequential biochemical profiles, changes in functional status, spiritual inventories, and serial individual nutrient analyses.

The first component is a major emphasis of research underway at the Arizona Health Watch Study sponsored by AURA (Allied University Research in Aging in the Sun Cities area). In order to appreciate the potential impact of linkages between primary care physician providers and community coalitions, a number of lessons learned from two community based health promotion programs, designed by The University of Arizona Department of Family and Community Medicine, will be reviewed in this article. Many of these lessons have been incorporated into the AURA research design.

PROJECT AGE WELL

Project AGE WELL began in 1980 with The University of Arizona's commitment to preventive care for low-income elderly through satellite geriatric nurse practitioner wellness clinics funded by the United Way, the City of Tucson, and the Pima County Council on Aging. By 1985, these earlier approaches evolved into a comprehensive team-based program which received a five-year grant by the Brookdale Foundation Group to conduct a longitudinal study on the

impact of health enhancement strategies and community-based programs on the health status of older adults.[18,19] Beyond 1990, that project will continue with support from individual participants and site sponsorship. Currently, over 500 participants are active in a variety of activities and settings.

Significant characteristics of the AGE WELL project include: a spectrum of common community settings; multiple risk factor interventions; longitudinal services and evaluation of individual health trends through annual reassessments; team-delivered interdisciplinary programs; linkages with primary health care providers (around 40% receive primary care through team physicians or nurse practitioners, with the other participants either self-referred or referred by other providers). Outside providers are kept aware of participant progress through annual health assessment updates.

AGE WELL sites have included low-income housing projects, senior parks and recreation centers, congregate living communities, churches, and senior education programs.

Selection of risk factor interventions was based on an initial survey at each site. Through a community-oriented primary care analysis, common targeted areas for risk reduction emerged, including: health care maintenance (screening, immunization, home safety visits, etc.), cardiovascular health, cancer prevention and control, osteoporosis fracture prevention, mental wellness, and medication awareness (counseling on safe use of medications). The expanded team has included a family practice geriatrician, geriatric nurse practitioners, clinical pharmacist, registered dietitian, exercise physiologist, counselor, and medical social worker.[20]

AGE WELL STUDY DESIGN

Antecedent variables are measured from the baseline questionnaire. A health assessment is given to all participants and an individualized plan is prepared with "treatment"/participation recommendations. Levels of participation are monitored through activity attendance records. Outcome variables are measured at annual updates. The design is quasi-experimental. Antecedent variables being evaluated are: age, sex, pre-existing morbidity, socioeconomic status, education, and the setting where the individual enrolls. Interventions include education classes weekly, exercise groups three times a week, a weekly stress control and support group, nutrition and medication counseling for individuals and small groups, a quarterly newsletter, and audiovisual media materials. Outcome variables are behavioral (lifestyle, health care utilization, dietary, attitude, perceived health), physiological (blood pressure, weight, cardiovascular endurance), and biochemical (SMA-20 with lipid profile). A control group consists of persons not participating in activities, but completing annual update questionnaires and modified health assessments. In addition to a health assessment exam, participants are offered a weekly education class, exercise activities three times a week, a weekly support group to control stress, individual nutrition and medication counseling, and a quarterly health education newsletter.

Data available at the end of Year 03 shows a moderately high compliance rate

with respect to attendance at class activities: active participants have attended on the average over 50% of all exercise and educational classes offered, and over 70% of support groups and over 90% of weight control and medication skills classes. The impact of these interventions on outcome variables will be measured at the end of Year 05.

Our preliminary findings suggest that:

1. Sixty percent of persons who were initially enrolled have remained active.

2. Compliance with recommendations ranged from 20% to 60% depending on the activity and may be "additive" to compliance with recommendations made by participants' primary care physicians.

3. Participation appears multidimensional: It has been more likely that persons would attend several classes versus one particular category of classes.

4. Interventions have somewhat of a "gestalt" effect in that one health promotion activity appears to reduce risk factors for several conditions.

5. Sites where participants appeared to have attained a higher educational level and socioeconomic status remain more active than those in low-income housing sites.

6. Multiple interventions (nutrition counseling, active exercise, general education) led to a significant reduction in LDL lipoprotein levels and significant increases in HDL levels.

7. Socioeconomic status, education, and population type are most strongly associated with positive behavioral, physiological, and biochemical outcome measurements.

8. Perceived mental health improvement is positively associated with high scores on inventories that measure later stages of adult development. Community health promotion activities appear to encourage socialization and other qualities that are conducive to ongoing adult development.

9. There is a potential for cost savings, although health care costs have not been monitored directly in this study. Costs of intervention activities average about $1.50 per hour per person. Whether or not such programs may be effective in reducing medical care cost requires further investigation.

10. AGE WELL has not been able to effectively reach minorities, low-income, and less educated older adults who appear less comfortable with community-based settings. Yet, these groups tend to practice more unhealthy behaviors and have less preventive screenings than

those groups traditionally more responsive to community health promotion efforts.

HEALTH PEERS

Health Peers is a second community-based project begun in early 1988 with support from the U.S. Administration on Aging. The primary goal of Health Peers has been to implement a cost-effective peer counseling model to train older adults as "health peer counselors" to teach risk reduction behaviors to members of their community. Participants have been drawn from rural, economically and ethnically diverse populations in Arizona including: Casa Grande, Nogales, Flagstaff, Tucson, Phoenix, Prescott, and Yuma. Of the minorities targeted, approximately 25% have been Hispanic. Materials and guide books have been developed in both Spanish and English. The Health Peers experience begins with a two-day team-delivered training session at specific community settings. Each training session includes: the basics of counseling; aging and disease; stress; nutrition; exercise; medications; and recommendations on how to develop change plans. In addition to these topics discussed at the training session, monthly updates are also offered to allow for further didactic dissemination of information and to allow Health Peer counselors to discuss their work problems and related issues. Health Peer counselors have developed multiple group affiliations including churches, special interest groups, service organizations, and social action committees. Most have also been involved in volunteer work in the community, hospital/health care settings, church/school, or home.

Preliminary evaluation of Health Peer training has shown (through pre and post tests) an increase in self-esteem as reflected by individual counselors feeling more useful and purposeful within their community. Trainees have also increased self-efficacy (with respect to their personal roles in their health care); and positive content acquisition has been measured with increased knowledge in the areas of general health, medication use, nutrition, exercise, and stress management. Hispanics in the study have tended to stay within established groups and have spent less time in self-improvement activities. The major lesson learned from Health Peers has been its impact on promoting personal self-responsibility and community responsibility. Six distinct stages of development have been identified, including:

I. Experimentation With Information

Counselors make personal lifestyle changes. They experience a change from a disease to a health focus. Simple changes are made such as dietary modification to include more fresh fruits.

II. Reaching Out To Family and Friends

The next stage involves trying out new information in safer environments, such as recommending changes in an adult/child's diet, helping a resident in a boarding home with their anemia, talking with their grandchildren about healthy lifestyles.

III. Begin to "Offer Self"

Counselors have done this by setting up "bus stop clinics" using their guidebook to engage in conversation or to become "supermarket skulkers" to help fellow shoppers take into consideration nutritional value through label interpretation as well as money savings. Many have set up support groups at their apartment complexes.

IV. Assuming Case Loads

In a variety of situations, counselors have engaged acquaintances as well as strangers in education. One noticed a neighbor throwing out garbage and commented on the nutritional value of the food remnants. Another began to counsel couples in apartment complexes. A third developed a "Care and Share" Committee in her retirement community where higher functioning residents select from a list of lonely people a "buddy" to keep track of. A fourth peer counselor set up a monthly education class in a nearby boarding home.

V. "Self-Improvement Program"

Many counselors begin to attend other types of programs to enhance their overall health and comprehensive lifestyle change.

VI. Train Other Health Peers

Many counselors have been involved in recruiting additional individuals for the training program.

SUMMARY

To break down the barriers to and implement the practice of preventive geriatrics (multiple risk factor intervention reduction and counseling to promote healthy aging), we will need increased research, increased training, and changes in health policy and reimbursement. We need a stronger emphasis on intervention through primary care and community-based programs rather than health care's current emphasis on high cost procedures and rescue medicine. Clinical preventive services now only receive 2% of the health care dollars expended on the elderly. We need a new vision of a true health care system linking medical care with: community-based health promotion programs, resources, and activities and, state-of-the-art health trends and assessment technology. This vision will allow for increased socialization among older adults and for the evolution of the traditional physician/patient relationship to individualize healthy aging trajectories. Fundamental lessons learned from community-based programs (such as Project AGE WELL and Health Peers) are that such programs and primary health care complement each other with a two-way information flow and the promise of a cost-effective partnership. Community programs that teach the safe use of medications, ways to decrease drug/nutrient interactions and implement critical preventive life/style prescriptions in group settings will give individuals better opportunity to

comply with recommendations made by primary care providers. A 60% compliance rate may be approachable. Long-term participation in health enhancement activities is possible over at least a five-year period. Minorities, low-income, and less educated elderly are difficult to reach by primary care providers and most large community-based programs. A health peer counseling model may be more effective.

REFERENCES

1. Cornoni-Huntley J, Brock DB, Ostfeld AM, et al. Established populations for epidemiologic studies of the elderly: Resource Data Book, National Institute on Aging, NIH Publication No. 86-2443, 1986.

2. Strauss MB. Familiar Medical Quotations. Little, Brown & Co., Boston, 1968.

3. Paffenburger RS Jr, Hyde RT, Wing DL, et al. Physical activity, all-cause mortality, and longevity of college alumni. N Engl J Med, 1986; 314:605-613.

4. Blair SN, Kohl HW III, Paffenburger RS Jr, et al. Physical fitness and all-cause mortality: A perspective study of healthy men and women. JAMA 1989; 262:2395-2401.

5. Tonstad S, Lindstel K. Self-report of physical activity and mortality patterns among Seventh-Day Adventist men. Prevention '90 abstract, Atlanta, GA, April 1990.

6. Guralnik JM, Kaplan GA. Predictors of healthy aging: prospective evidence from the Alameda County study. Am J Public Health, 1989; 79:703-708.

7. Stults BM, Preventive health care for the elderly. West J Med, 1984; 141:832-845.

8. Clinical practice committee. Screening for breast cancer in elderly women. JAGS, 1989; 37:883-884.

9. Clinical practice committee. Screening for cervical carcinoma in elderly women. JAGS, 1989; 37:885-887.

10. Office of Disease Prevention and Health Promotion. Prevention Report, June, 1989.

11. Price JH, Oesmond JM, Cosh DP. Family practice physicians' perceptions and practices regarding health promotion for the elderly. Am J Prev Med, 1988; 4:274-281.

12. Black JS, Sefnik T, Kapoer W. Health promotion and disease prevention in the elderly: comparison of housestaff and attending physician attitude and practices. Arch Intern Med, 1990; 150:389-393.

13. U.S. Preventive Services Task Force. Guide to Clinical Preventive Series: An Assessment of the Effectiveness of 189 Interventions. Williams and Wilkins, Baltimore, 1989.

14. DHHS. Promoting health/preventing disease: Year 2000 objectives for the nation. Public Health Service, 1989.

15. Abdellah FG, Moore JR. Surgeon General's Workshop on Health Promotion and Aging Proceedings, 1988.

16. Final Report of the INSURE Project, 1988.

17. Office of Technology Assessment. Preventive Health Services for Medicare Beneficiaries: Policy and Research Issues. Special Report, February 1990.

18. Vuturo AF. Project AGE WELL. In Proceedings, Surgeon General's Workshop on Health Promotion and Aging, 1988.

19. Vuturo, AF, Kligman E. Hospital-Based Programs. In the Age Base Directory of Health Promotion Program for Older Adults. Brookdale Foundation Group, NY, 1989.

20. Gardner ME, Sennott-Miller, L. Pharmacist participation in a health promotion project for the elderly. The Consultant Pharmacist, Jan-Feb, 1987.